

Energy Innovations Small Grant Program

Final Report Instructions

Style Instructions

Font Type: Times Roman or Helvetica

Font Size: 12 pt

Margins: 1 inch minimum

Headers/Footers: No headers. Use continuous page number footer from front to back except for front matter, which is numbered with roman numerals. Do not number paragraphs.

Bindings: Spring clips only

Copies: Draft Report (2 paper copies, 1 electronic MS Word copy emailed or on disk)

Final Report (3 paper copies, 1 electronic MS Word copy emailed or on disk)

Paper Copies: Printed single sided

Final Report Outline

Cover Page (*example provided*)

Legal Notice (*provided*)

Acknowledgement Page (*optional*)

Table of Contents (*example provided*)

Abstract (*250 words*)

Executive Summary (*2-3 pages*)

Introduction (*body of main report 15-20 pages*)

Project Objectives

Project Approach

Project Outcomes

Conclusions

Recommendations

Public Benefits to California

Development Stage Assessment

References

Glossary

Appendices (*no limit specified*)

Detailed guidelines for each of the sections listed in the outline above are expanded on in this document. You will also need to refer to the “**Stages and Gates Process**” document posted on our web site at www.energy.ca.gov/research/innovations under “**Active Award Document Resources**”.

After reviewing the final report instructions please send Steve Russell (srussell@projects.sdsu.edu) an outline of the Final Report that as a minimum identifies the Project Objectives, Project Outcomes, Conclusions and Recommendations that will be reported on in the report. Then call Steve Russell (619) 594-3293 or Hal Clark (619) 594-1158 to discuss the outline and to obtain answers to any questions you may have. These two steps are intended to provide early feedback that can greatly facilitate the production of the report and minimize the need for extensive revisions later.

If proprietary/confidential information is needed in the report to fully communicate the research findings, all such information must be confined to a proprietary appendix, which will be protected and not released to the public. The remainder of the report must be non-proprietary and authorized unrestricted public distribution.

General Guidelines

1. The report should be written to the level of an inquisitive, reasonably well-educated lay reader. Imagine that the reader just paid for this research project and they want to understand how you spent their money and the rationale for proceeding in the direction chosen.
2. Apply the test of completeness. Are all the pieces there? Are all the references clear and do those in the text match those in the reference section? Are the relationships between the partners and the players clearly explained?
3. Apply the test of logic. Does the document flow and make sense? Is the need for the research clearly described? Is the technical approach clearly described? Do the conclusions make sense? Are they drawn from the analysis? Do the numbers check? Is it clear how the numbers were derived?
4. If the project didn't do everything it intended to do, explain.
5. The final report must primarily address the specific research objectives that were funded with EISG funds. Doing this will help manage the scope and the effort required for this report. In projects where there was cost sharing with other funding sources you need to make clear what portions were funded with EISG funds. If the EISG project was just a small part of a larger project you should not intermingle comments related to the larger project with comments about the EISG project that would in any way confuse the reader about the work performed as part of the EISG project.
6. There needs to be a clear relationship between the objectives and the outcomes. The outcomes of the EISG funded research project needs to be clearly differentiated from the outcomes of the overall program of which the research is a part. The outcomes of the program should not be intermingled with the outcomes of the project.
7. The methods used to conduct the research need to be explained.
8. Data that is presented in the report needs to be analyzed. If you present a picture, graph or table, be sure that you discuss and interpret its meaning in the text, not just refer to it.
9. Each conclusion needs to be substantiated by the analysis contained in the report.
10. Figures and Tables must clearly relate to, and be consistent with the text, and vice versa. (If the text says the generator had a capacity of 30 kW, the table should not say it was 31.2 kW.)
11. Use consistent references to report performance specifications and results. For example, if a piece of equipment is to be referred to by its nominal nameplate rating then use that reference consistently throughout the report. If, however, the desired number was the measured performance of the device, (almost always different from nameplate) then consistently use that measured number. Do not mix the two in the narrative.
12. The text needs to clearly refer to the attached appendices. It should also explain how the data in the appendices matters to the text. If it doesn't really matter, it probably should be dropped. (You may still need it because it is a deliverable according to the grant agreement, so check this carefully.) References to multi-page appendices need to be specific to the page or section of the appendix, not just a general reference to Appendix X.

NOTE: The abbreviation "CEC" is not allowed in final reports. Choose either Commission or Energy Commission throughout the report. Be consistent with one of the choices, and use it throughout the report.

Appendix A to FAR 99-04

**ENERGY INNOVATIONS SMALL GRANT
(EISG) PROGRAM**

EISG FINAL REPORT

**PROCESS FOR CONVERTING SEWAGE SLUDGE AND MUNICIPAL SOLID
WASTES TO CLEAN FUELS**

EISG AWARDEE

Worldwide ENVIRONMENTAL ENERGY SYSTEMS INC.

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Grant #: 99-04

Grant Funding: \$75,000

Term: September 1999 – July 2001

PIER Subject Area: Renewable Energy Technologies

Legal Notice

This report was prepared as a result of work sponsored by the California Energy Commission (Commission). It does not necessarily represent the views of the Commission, its employees, or the State of California. The Commission, the State of California, its employees, contractors, and subcontractors make no warranty, express or implied, and assume no legal liability for the information in this report; nor does any party represent that the use of this information will not infringe upon privately owned rights. This report has not been approved or disapproved by the Commission nor has the Commission passed upon the accuracy or adequacy of the information in this report.

Inquires related to this final report should be directed to the Awardee (see contact information on cover page) or the EISG Program Administrator at (619) 594-1049 or email eisgp@energy.state.ca.us.

Acknowledgement Page

(Optional)

This is the place for the author or principal investigator to acknowledge or express appreciation to those who participated in the project. This may be a paragraph, or a list of names, and if appropriate their affiliations.

Table of Contents

Sample Table of Contents

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Recommendations.....	#
Public Benefits to California	#
Development Stage Assessment	#

References.....	#
End Notes.....	#
Glossary.....	#
Appendices (<i>Appendices are numbered using roman numerals I, II, III etc.</i>)	

List of Figures

(Insert list of figures at end of table of contents)

List of Tables

(Insert list of tables after list of figures)

Abstract

This section should be the technical counterpart to the executive summary. Less marketing and sales oriented than the Executive Summary. This should be similar to what you would find in a technical trade periodical. Limited to 250 words, essentially a very brief Executive Summary. The Abstract covers the purpose, objectives, outcomes and conclusions. Geared toward a more technical audience.

Key Words: (List 5-10 key words for computer searches)

Executive Summary

A miniature final report that summarizes the content in the following sections in two to three pages:

1. Introduction (*Why this project was necessary*)
2. Project Objectives (*What you planned to accomplish that is measurable or knowable*)
3. Project Outcomes (*What were the actual factual findings*)
4. Conclusions (*What is the meaning or interpretation of the factual findings*)
5. Recommendations (*What you think should occur next*)
6. Public Benefits to California (*Who will benefit from this research*)

Numbered list formatting is suggested to keep it short and concise. Assume a non-technical, management-level readership. Put on the hat of an inquisitive, reasonably well-educated lay reader who may be interested in purchasing or implementing the subject technology. The Executive Summary should not introduce new information that is not discussed in the main body of the report.

Introduction

- Background and Overview (Why this project was necessary) - Provide relevant background, identify this project's PIER subject area and the goals of this research. Use Stages and Gates terminology, where appropriate, to identify what stage the project has reached in its path to market.
- Report Organization – Provides a brief high-level roadmap to the rest of the report.

Project Objectives

(What you planned to accomplish that is measurable or knowable) - Present the technical and economic objectives for your project. Include all objectives that were identified in the original scope of

work. In order to be listed as an objective the research plan must have included a method for determining the answer. Use Stages and Gates terminology where appropriate. New objectives that emerged during the project should also be listed and the reasons for the new direction discussed in the Project Approach section.

Each objective shall be separately identified, a useful form is:

Project objectives were to:

- Verify (an action verb followed by relevant text)....
- Determine....
- Measure...
- Develop....

Project Approach

This section discusses the tasks you undertook and your approach to the research (What you did to accomplish your objectives). Discuss the testing procedures you undertook and the system modifications and improvements you made.

Project Outcomes

This is where you present your results (*What were the actual factual findings*). Organize this section so that results are presented in the same order as the objectives. A short version of each Outcome should be stated in list form. Supporting paragraphs that describe each Outcome should follow each bullet.

There can be more Outcomes than there were Objectives. For example, there may be more than one Outcome per Objective. It is also possible to have an unanticipated Outcome during your research. However, you cannot have stranded objectives, all Objectives, whether met or not, must be discussed in this section. If this section is particularly long, then it is useful to create a summary at the end of this section where all of the list elements are drawn together as a summary.

Conclusions

Conclusions (*What is the meaning or interpretation of the factual findings*)- Organize the Conclusions in the same order as Objectives and Outcomes. You may have Conclusions that are broader than individual Objectives and Outcomes. Please present these after you present the individual Conclusions. Conclusions must be drawn from evidence presented in the report. You should also include conclusions regarding the commercialization potential of the proposed technology based on the new research findings.

Recommendations

Recommendations (What you think should occur next) - Recommendations should derive from the Conclusions presented. Recommendations specific to individual Objectives, Outcomes and Conclusions should be presented in the original order. General Recommendations should follow. What are the next logical research objectives that need to be accomplished to advance this technology?

Public Benefits to California

This section discusses two issues: (1) what benefits has California already received from this contract, if applicable, and (2) if this project is successful and the results widely used, how will California benefit. If the benefit is monetary savings calculate the potential yearly savings and identify all supporting assumptions used in the calculation. All cited benefits must be attributable to the proposed technology that was the subject of the grant research.

Development Stage Assessment

This is where you should assess where your overall development effort is in terms of the Stages and Gates process. Summarize the current development status using the Development Assessment Matrix below. Evaluate the degree to which you have completed the activities associated with each cell to include all relevant work accomplished both inside and outside of the EISG grant project. Shade in the portion of each cell that corresponds to the percent complete. The result should be a horizontal bar chart. Following the matrix, create section headings for the seven types of activities that are tracked:

- Marketing
- Engineering/Technical
- Legal / Contractual
- Risk Assessment / Quality Plans
- Strategic
- Production Readiness
- Public Benefits / Costs

Provide supporting evidence for the completion rating indicated in the matrix for each tracked activity. Provide sufficient information to allow the Program Administrator to answer the gate questions associated with each cell in which work was performed. Some of the information contained in the Conclusion and Recommendation sections will be repeated here in the appropriate sections. The EISG program is designed to primarily assist in the development of projects through Stage 3 with the highest priority being the confirmation of technical feasibility through physical testing. Projects that are successful and intend to seek follow-on funding through PIER need to show evidence of a coordinated development effort through Stage 3 to be competitive. Include relevant supporting documents (e.g., market assessment, business plan, etc.) as appendices to the final report.

Development Assessment Matrix

(Sample)

Stages Activity	1 Idea Generation	2 Technical & Market Analysis	3 Research	4 Technology Develop- ment	5 Product Develop- ment	6 Demon- stration	7 Market Transfor- mation	8 Commer- cialization
Marketing								
Engineering / Technical								
Legal/ Contractual								
Risk Assess/ Quality Plans								
Strategic								
Production. Readiness/								
Public Benefits/ Cost								

Note: This table was created using MS Word. Bars can be adjusted within a cell by dragging the end lines. To reset an end line if it locks onto the line in an adjacent cell or if you want to eliminate all shading in a cell that is divided, select the entire cell and select merge cells in the Table pull down menu. Then under Format select Borders and Shading and go to the shading submenu where you select No Fill. Then select the draw function under the Table menu and draw a new dividing line in the desired cell. Dividing lines in adjacent cells may need to be temporarily dragged away from the location you want to draw a line for the line to take after which the lines can be dragged to the desired location. Then select and apply 10% gray shading to the appropriate section of the cell.

Endnotes

Endnotes are preferred to footnotes.

Glossary

If there are more than 10 acronyms and/or uncommon technical terms then a glossary with definitions for each should be provided at the end of the report.

References

This is where you list all documents referred to in the body of the report. List references in standard bibliographic format. Be sure to check that shorthand references contained in the body of the report are accurate. Any documents referred to in the Appendices should be listed in the reference section in the appropriate Appendix.

Appendices

Designated by Roman numerals. Information that is not directly related to the work that was performed in this project or contains supporting details should be included in the appendices (i.e., summary of literature search, test plans, raw test data, business plans etc.)

All proprietary/confidential information that is needed to fully assess the success of the project should be included in the last appendix. The proprietary appendix will be protected and not released to the public. The remainder of the report must be non-proprietary and authorized unrestricted public distribution.